Audit of Forest Planning and Practices
British Columbia Timber Sales Program
in the Chilcotin Forest District

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Report from the Board

A. Report from the Board

This is the Board's report on a compliance audit of the British Columbia Timber Sales (BCTS) Program in the Chilcotin Forest District. BCTS's operating areas are scattered throughout the Chilcotin Forest District. The community of Alexis Creek, about 120 kilometres west of Williams Lake, is the main community in the audit area (see map on Page A-4).

The Report from the Auditor (Part C) provides details regarding the status of land use planning in the area, the scope of the audit, and the audit findings. The Report from the Auditor is based on applying the audit procedures described in Part B.

The audit examined BCTS's operational planning; timber harvesting; road construction, maintenance and deactivation; silviculture; and fire protection practices for the period of August 1, 2002, to August 22, 2003.

As detailed in the Report from the Auditor, the audit found that except for the failure to meet free-growing obligations, the operational planning; timber harvesting; silviculture; road construction maintenance and deactivation; and fire-protection planning and activities of BCTS were in compliance with the Forest Practices Code, in all significant respects.

Before completing this report, the Board considered the Report from the Auditor, along with supporting audit evidence, as well as written representations from BCTS. The Board affirms the auditor's findings and conclusions regarding the compliance of forest planning and practices carried out by BCTS.

Achievement of Free-Growing Obligations

The audit found a situation of significant non-compliance related to the failure to establish free-growing stands within specified timeframes. The Report from the Auditor describes the nature and extent of the non-compliance. The non-compliance is considered significant because it demonstrates a breakdown in the silviculture management system designed to achieve a free-growing stand of trees in harvested areas.

It should be noted that government's responsibility to meet the free-growing obligations on the audited blocks was administered by the Chilcotin Forest District until April 2003, when the administration was transferred to BCTS; BCTS has "inherited" the free-growing obligation problem identified by the audit.

In its written representations, BCTS describes steps it has taken to address challenges with the implementation of the silviculture management system. These steps include development of a standard operating procedure for scheduling and carrying out free-growing surveys and treatments near the end of the free-growing period. BCTS is also in the process of reviewing all openings to ensure that treatments and surveys are appropriately scheduled. The Board

recognizes the efforts that BCTS is taking to improve its silviculture management system and encourages BCTS to complete implementation of these improvements.

Recommendation

As provided by section 185 of the Act, the Board makes the following recommendation:

> The British Columbia Timber Sales Program in the Chilcotin Forest District implements its standard operating procedure; and completes its review of all Chilcotin Forest District openings to ensure treatments and surveys are appropriately scheduled, and carries out those treatments.

In accordance with section 186 of the Act, the Board requests that the British Columbia Timber Sales Program in the Chilcotin Forest District advise the Board by December 31, 2004 of the actions taken to address these issues and this recommendation.

Land Use Plans

BCTS' operating area falls under the Cariboo-Chilcotin Land Use Plan (CCLUP), parts of which were declared a higher level plan under the Forest Practices Code on January 23, 1996. The audit found that, where government had developed targets and objectives for values under the CCLUP, BCTS's forest planning and practices appropriately addressed these values.

The Board has emphasized the need for timely strategic planning in a number of reports, including its 2000 Annual Report and its 2001 special investigation report, Implementation of the Cariboo-Chilcotin Land Use Plan in Forest Development Plans. Yet, the audit found that some planning elements, needed by licensees to ensure that operational plans are consistent with higher level plan objectives, are still missing eight years after the CCLUP was announced by government.

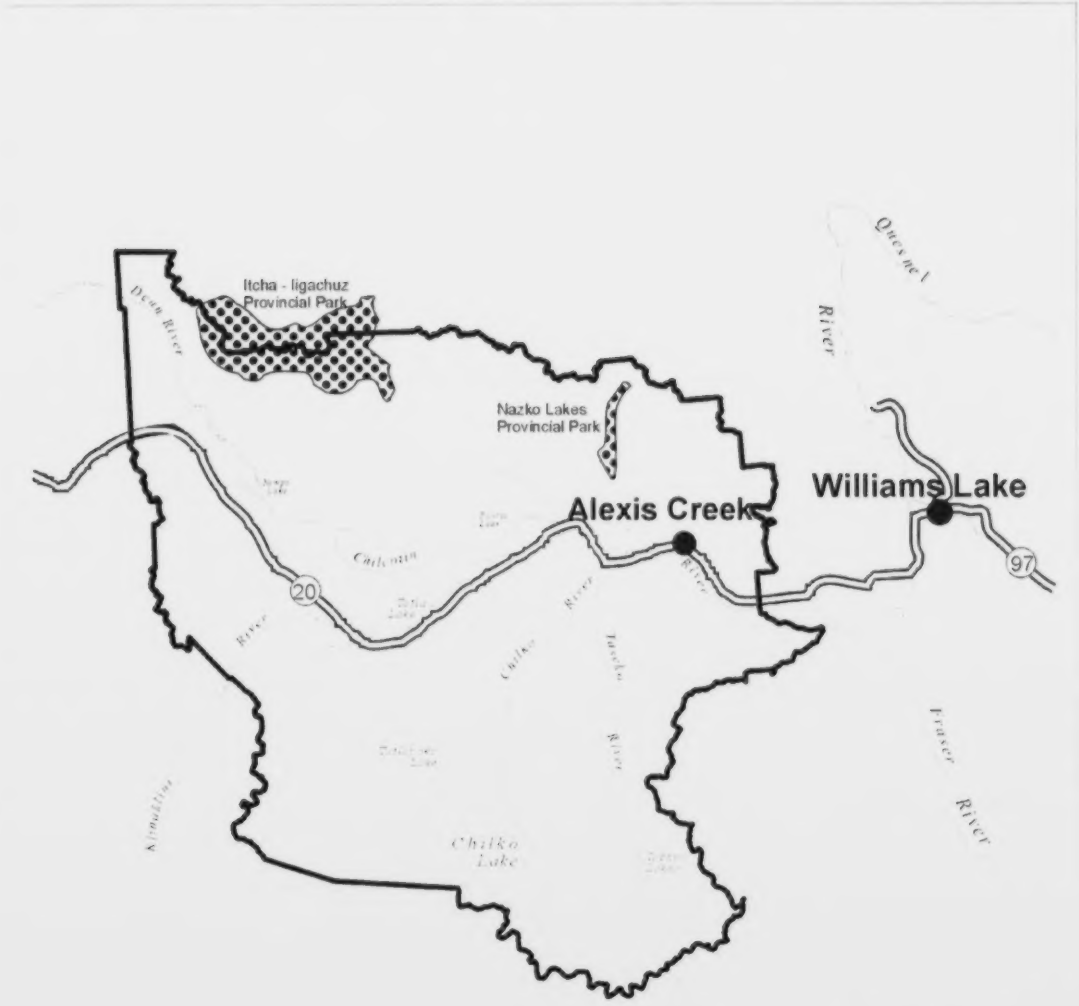
The Board understands that the Ministry of Sustainable Resource Management (MSRM) is developing sustainable resource management plans (SRMP) that will provide sub-regional guidance to operational planners, for resource values in the area covered by the CCLUP. The Board encourages MSRM to complete this process in a timely and effective manner and encourages government to formalize appropriate requirements in the SRMP as *Forest and Range Practices Act* (FRPA) objectives.

The Board encourages BCTS and other licensees operating under the CCLUP to follow the SRMP guidance and notes that any future audits that are conducted in the area covered by the CCLUP will assess how auditees have addressed applicable SRMP guidance in forest planning and practices.

Bruce Fraser

Bruce Fraser, PhD
Chair, Forest Practices Board

June 7, 2004


Itcha - Ilgachuz
Provincial Park
Nazko Lakes
Provincial Park
Alexis Creek
Williams Lake
20
97
Chilko
Lake
Fraser
River
Highway
Chilcotin Forest
District Boundary
Provincial Park
(Map not to scale)
Enlarged
area

Forest Practices Board Compliance Audit Process

B. Forest Practices Board Compliance Audit Process

Background

The Forest Practices Board conducts audits of government and agreement-holders for compliance with the *Forest Practices Code of British Columbia Act* and regulations (the Code). The Board has the authority to conduct these periodic independent audits under section 176 of the *Forest Practices Code of British Columbia Act* (the Act). Compliance audits examine forest planning and practices to determine whether or not they meet Code requirements.

The Board undertakes both "limited scope" and "full scope" compliance audits. A limited scope audit examines selected forest practices (e.g., road construction, maintenance and deactivation; timber harvesting; or silviculture) and the related operational planning activities. A full scope audit examines all operational planning activities and forest practices.

The Board determines how many audits it will conduct in a year, and what type of audits (limited or full scope), based on budget and other considerations. The Board audits agreement-holders who have forest licences or other tenures under the *Forest Act* or the *Range Act*. The Board also audits government's BC Timber Sales program (BCTS), which is administered by Ministry of Forests' timber sales offices. Selection of agreement-holders and BCTS programs for audit is done randomly, using a computer program, to ensure a fair, unbiased selection of auditees.

Audit Standards

Audits by the Forest Practices Board are conducted in accordance with the auditing standards developed by the Board. These standards are consistent with generally accepted auditing standards.

The audits determine compliance with the Code based on criteria derived from the *Forest Practices Code of British Columbia Act* and its related regulations. Audit criteria are established for the evaluation or measurement of each practice regulated by the Code. The criteria reflect judgments about the level of performance that constitutes compliance with each requirement. The standards and procedures for compliance audits are described in the Board's Compliance Audit Reference Manual.

Audit Process

Conducting the Audit

Once the Board selects an audit and decides on its scope (limited scope or full scope), the audit period and the staff and resources required to conduct the audit are determined. Board staff

also meet with the party being audited to discuss the logistics of the audit before commencing the work.

All the activities carried out during the period subject to audit are identified; for example, harvesting or replanting sites and building or deactivating road sections. The items that make up each forest activity are referred to as a "population." For example, all sites harvested form the "timber harvesting population." All road sections constructed form the "road construction population." The populations are then sub-divided based on factors such as characteristics of the sites and potential severity of the consequences of non-compliance on the sites.

For each population, the auditors choose the most efficient means of obtaining information to conclude whether there is compliance with the Code. Because of limited resources, auditors usually rely upon sampling to obtain audit evidence, rather than inspecting all activities.

Individual sites and forest practices within each population have different characteristics, such as the type of terrain or type of yarding. Each population is divided into distinct sub-populations on the basis of common characteristics (e.g., steep ground vs. flat ground). A separate sample is selected for each population (e.g., the cutblocks selected for auditing timber harvesting). Within each population, more audit effort (i.e., more audit sampling) is allocated to the sub-population where the risk of non-compliance is greater.

Audit work in the field includes assessments from the air using helicopters and intensive ground procedures, such as measuring specific features like road or riparian reserve zone width. The audit teams generally spend one to two weeks in the field.

Evaluating the Results

The Board recognizes that compliance with the many requirements of the Code is more a matter of degree than absolute adherence. Determining compliance, and assessing the significance of non-compliance, requires the exercise of professional judgment within the direction provided by the Board.

Auditors collect, analyze, interpret and document information to determine the audit results. The audit team, composed of professionals and technical experts, first determines whether forest practices are in compliance with Code requirements. For those practices considered to not be in compliance, the audit team then evaluates the degree to which the practices are judged not in compliance. The significance of the non-compliance is determined based on a number of criteria, including the magnitude of the event, the frequency of its occurrence and the severity of the consequences.

As part of the assessment process, auditors categorize their findings into the following levels of compliance:

Compliance – where the auditor finds that practices meet Code requirements.

Not significant non-compliance – where the auditor, upon reaching a non-compliance conclusion, determines that a non-compliance event, or the accumulation and consequences of a number of non compliance events, is not significant and is not considered worthy of reporting.

Significant non-compliance – where the auditor determines that the event or condition, or the accumulation and consequences of a number of non-compliance events or conditions, is or has the potential to be significant, and is considered worthy of reporting.

Significant breach – where the auditor finds that significant harm has occurred, or is beginning to occur, to persons or the environment as a result of the non-compliance. A significant breach can also result from the cumulative effect of a number of non-compliance events or conditions.

Identification of a possible significant breach requires the auditor to conduct tests to confirm whether or not there has been a breach. If it is determined that a significant breach has occurred, the auditor is required by the *Forest Practices Board Regulation* to immediately advise the Board, the party being audited, and the Ministers of Forests, Energy and Mines, and Water, Land and Air Protection.

Reporting

Based on the above evaluation, the auditor then prepares the "Report from the Auditor" for submission to the Board. The party being audited is given a draft of the report before it is submitted to the Board so that the party is fully aware of the findings. The auditee is also kept fully informed of the audit findings throughout the process, and is given opportunities to provide additional relevant information and to ensure the auditor has complete and correct information.

Once the auditor submits the report, the Board reviews it and determines if the audit findings may adversely affect any party or person. If so, the party or person must be given an opportunity to make representations before the Board decides the matter and issues a final report to the public and government. The representations allow parties that may potentially be adversely affected to present their views to the Board.

At the discretion of the Board, representations may be written or oral. The Board will generally decide on written representations, unless the circumstances strongly support the need for an oral hearing.

The Board then reviews the report from the auditor and the representations from parties that may potentially be adversely affected before preparing its final report, which includes the Board's conclusions and, if appropriate, recommendations.

If the Board's conclusions or recommendations result in newly adversely affected parties or persons, additional offers of representations would be required.

Once the representations have been completed, the report is finalized and released: first to the auditee and then to the public and government.

Report from the Auditor

C. Report from the Auditor

1.0 Introduction

As part of the Forest Practices Board's 2003 compliance audit program, the British Columbia Timber Sales (BCTS) program in the Chilcotin Forest District was selected for audit from the population of twelve BCTS business areas within the province. Each business area is responsible for BCTS activities in two or more forest districts. The Chilcotin Forest District portion of BCTS Cariboo-Chilcotin business area was selected randomly and not on the basis of location or level of performance.

BCTS is a new program and organization that has replaced the Ministry of Forest's Small Business Forest Enterprise Program (SBFEP). The new organization has a reporting structure independent of forest district offices. Essentially all of the activities previously undertaken by the SBFEP were taken over by BCTS as of April 1, 2003. Because the audit examined activities and obligations over a one year period, August 2002 to August 2003, it includes those undertaken by both the SBFEP and BCTS. However, for ease of reading this report, activities, obligations and findings will be referenced to either BCTS or to government.

BCTS operating areas are scattered throughout the Chilcotin Forest District. The community of Alexis Creek, about 120 kilometres west of Williams Lake, is the main community in the audit area (see map on Page A-4). BCTS program harvested about 90,000 cubic metres of wood in the district during the audit period.

The terrain in most of the district is flat or gently rolling. The terrain is mountainous in the west and southern parts, but few activities subject to audit occurred in those areas. Most of the district is quite dry and contains slow-growing forest types that produce low volumes per hectare. There are relatively few drainage features in the active areas. The terrain is generally low risk for landslides.

Higher Level Plans

The audit area falls under the Cariboo-Chilcotin Land Use Plan (CCLUP), parts of which were declared a higher level plan under the Forest Practices Code on January 23, 1996.

2.0 Audit Scope

The audit examined BCTS' planning, field activities and obligations in the areas of operational planning (including forest development plans and silviculture prescriptions); timber harvesting; road construction, maintenance and deactivation; silviculture; and fire protection. These activities were assessed for compliance with the *Forest Practices Code of British Columbia Act* and related regulations (the Code).

All activities, planning and obligations for the period August 1, 2002, to August 22, 2003, were included in the scope of the audit.

The activities and obligations carried out by BCTS during the audit period, and therefore subject to the audit, were:

- harvesting of 45 cutblocks, plus harvesting of 51 small patches exempted from various planning requirements
- layout and design of 15 road sections totalling 30.2 kilometres
- construction of 46 road sections totalling 58.7 kilometres
- maintenance of approximately 650 kilometres of road, involving activities such as road surfacing and cleaning culverts and ditches
- maintenance of 10 bridges
- deactivation of 32.9 kilometres of roads
- site preparation for reforestation on 50 cutblocks
- tree planting on 17 cutblocks
- tree spacing on 3 cutblocks
- mechanical brushing on 25 cutblocks
- regeneration obligations on 35 cutblocks
- free-growing obligations on 25 cutblocks
- fire-protection planning and activities

Licence activities in the audit period were approved under the 2001 forest development plan and subsequent amendments. No bridges were constructed in the audit period.
Section 3 describes the audit of these activities, and the results. The Board's audit reference manual, *Compliance Audit Reference Manual, Version 6.0, May 2003*, sets out the standards and procedures that were used for this audit.

3.0 Audit Findings

Planning and practices examined

The audit of selected roads and cutblocks included ground-based procedures and assessments from the air using a helicopter. The audit examined:

- harvesting of 16 cutblocks, plus harvesting of 9 small patches exempted from various planning requirements
- construction of 15 road sections totalling 23.6 kilometres
- maintenance of approximately 145 kilometres of road

- deactivation of roads totalling 9.8 kilometres
- maintenance of 10 bridges
- site preparation for reforestation on 5 cutblocks
- tree spacing on 1 cutblock
- mechanical brushing on 2 cutblocks
- regeneration obligations on 6 cutblocks
- free-growing obligations on 25 cutblocks (19 field visited)
- fire-protection planning and activities

Overall Findings

The audit found that, with the exception of free-growing obligations, BCTS complied in all significant respects with the Code's planning and practices requirements for operational planning; harvesting; silviculture; road construction, maintenance and deactivation; and fire-protection activities.

Free-growing obligations

The audit found a situation of significant non-compliance related to failure to establish free-growing stands within specified timeframes in harvested areas.

Specifically, the audit found that government silviculture records indicated that 16 of 25 blocks in the audit population had not been established as free-growing stands within specified timeframes, as required by the Code. In addition, on one of the nine blocks declared free growing, a two- to five-hectare portion does not appear to be free growing, contrary to the results of a 2002 survey.

In seven of the blocks examined in the audit, additional treatments had been planned but were not undertaken as scheduled. In six of the blocks examined, the silviculture prescriptions had not been amended to recognize that the free-growing date would not be achieved.

The non-compliance is considered significant because it demonstrates a breakdown in the silviculture management system designed to achieve a free-growing stand of trees in harvested areas. The attainment of a free-growing stand is the ultimate goal of basic silviculture. The right to harvest the Crown resource is given on condition that the area is returned to a free-growing state.

The potential effect of this non-compliance on future timber yields is not yet high. Of the 11 non-declared blocks assessed by the audit, it is likely that a significant portion of the total area of 958 hectares was actually free growing at the time, based on ocular examination during the audit fieldwork. The remaining areas not yet free growing were mostly affected by overstocking and aspen competition. Overstocking and aspen competition had not yet resulted in obvious growth reduction.

The main area of the Code to which the non-compliance relates is section 70(4)(e) of the *Forest Practices Code of British Columbia Act*.

Effective April 1, 2003, the MOF reorganized and replaced the SBFEP with BCTS, as a separate entity from the forest district offices. Government's responsibility to meet the free-growing obligations on the audited blocks was administered by the Chilcotin Forest District until April 2003, when the administration was transferred to BCTS. BCTS has "inherited" the free-growing problem identified by the audit.

4.0 Other Comments

Operational Planning in CCLUP areas

In 1996, portions of the CCLUP were established as a higher level plan under the Code. The audit assessed the 2001 forest development plan and subsequent amendments to ensure consistency with the CCLUP.

The audit found that BCTS forest development plan was consistent with certain CCLUP targets and objectives. The audit could not determine if the forest development plan was consistent with the CCLUP's targets and objectives for visual quality, roaded access, lake management and wildlife migration routes because planning elements were not yet available for parts or all of the area under the forest development plan. Examples of missing elements are:

- designation of viewsheds and associated management requirements for existing tourism operations, backcountry areas, key lakes and other features; and
- designation of bighorn sheep and deer migrations routes and associated management requirements.

Those planning elements have not yet been determined by government, even though the higher level plan that envisioned them has been in effect for about eight years. As a consequence, licensees are unable to ensure that forest development plans are consistent with the related higher level plan objectives.

5.0 Audit Opinion

In my opinion, except for the failure to meet free-growing obligations described below, the operational planning; timber harvesting; silviculture; road construction, maintenance and deactivation; and fire-protection planning and activities of the British Columbia Timber Sales program in the Chilcotin Forest District, from August 1, 2002, to August 22, 2003, were in compliance, in all significant respects, with the requirements of the Code as of August 2003.

As described in Section 3 of this report, the audit identified a situation of significant non-compliance related to failure to establish free-growing stands within specified timeframes in harvested areas. Sixteen of 25 blocks that were required to achieve free-growing status had not yet attained free-growing status.

Without qualifying my opinion, I draw attention to Section 4 of this report, which explains the place of higher level plans in the planning regime anticipated by the Code and describes the resulting limitations on the audit's ability to ensure that operational planning was consistent with CCLUP targets and objectives.

In reference to compliance, the term "in all significant respects" recognizes that there may be minor instances of non-compliance that either may not be detected by the audit, or that are detected but not considered worthy of inclusion in the audit report.

Sections 2 and 3 of this report from the auditor describe the basis of the audit work performed in reaching this opinion. The audit was conducted in accordance with the auditing standards of the Forest Practices Board. Such an audit includes examining sufficient forest planning and practices to support an overall evaluation of compliance with the Code.

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March 16, 2004

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